

TRABUCO CANYON WATER DISTRICT

DOVE LAKE NOTICE

November 25, 2009

Recently, you may have noticed an intermittent rotten egg odor emanating from the water in Dove Lake. This is due to the fact the lake has recently “turned over”. This is a naturally occurring phenomenon with lakes and ponds that occurs when the seasons change from warm to cool and cool to warm. The recent cool air lowered the surface temperature of the water causing it to displace the warmer lower level of water (i.e. water at the bottom of the lake), thus the term “turned over.” The turning over of the lower level of water also brings to the surface hydrogen sulfide gas; this gas smells like rotten eggs.

This situation is a natural process. While it poses no health risks to surrounding residents or visitors to the community, it is a bit of a nuisance on occasions when there is a slight breeze or movement of air. Also, because the odorous gas is a bit heavier than air, the rotten egg smell will be more prevalent at night when there is little or no wind. The most recent turn over mainly has been detectable around the dam face and adjacent road.

A lake turn over will heal itself in a period of one to three weeks. As of this writing, this is the second week of the healing process. The District is monitoring the water quality in the lake. Specifically, the District monitors oxygen levels (dissolved oxygen), pH, temperature, and hydrogen sulfide. All of the most recent tests show the lake is in the healing process. The District’s protocol for dealing with this lake turn over is to disturb the water as little as possible and allow the re-aeration of the water to occur. This will eventually remove the hydrogen sulfide at the lakes surface.

Please visit our website at www.tcwd.ca.gov for more information concerning this.

Your understanding is appreciated during this time.